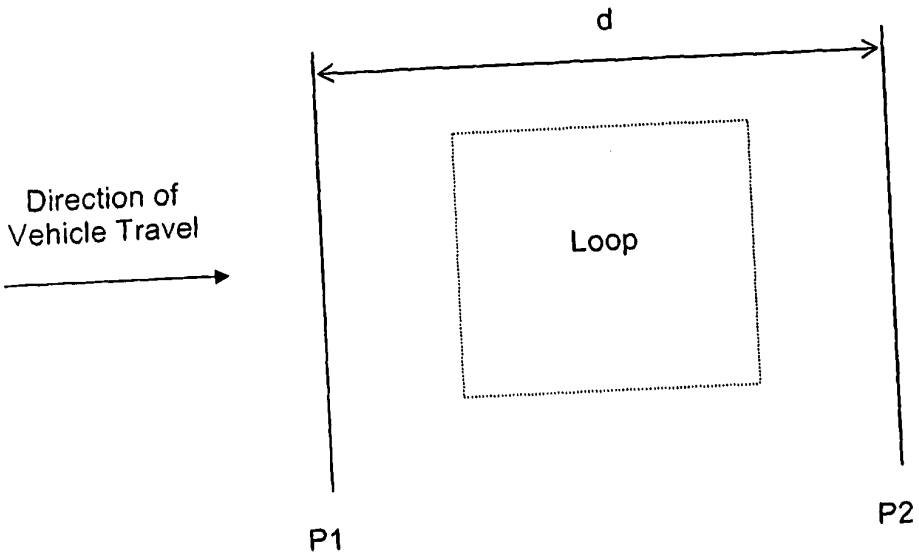

Figure 1

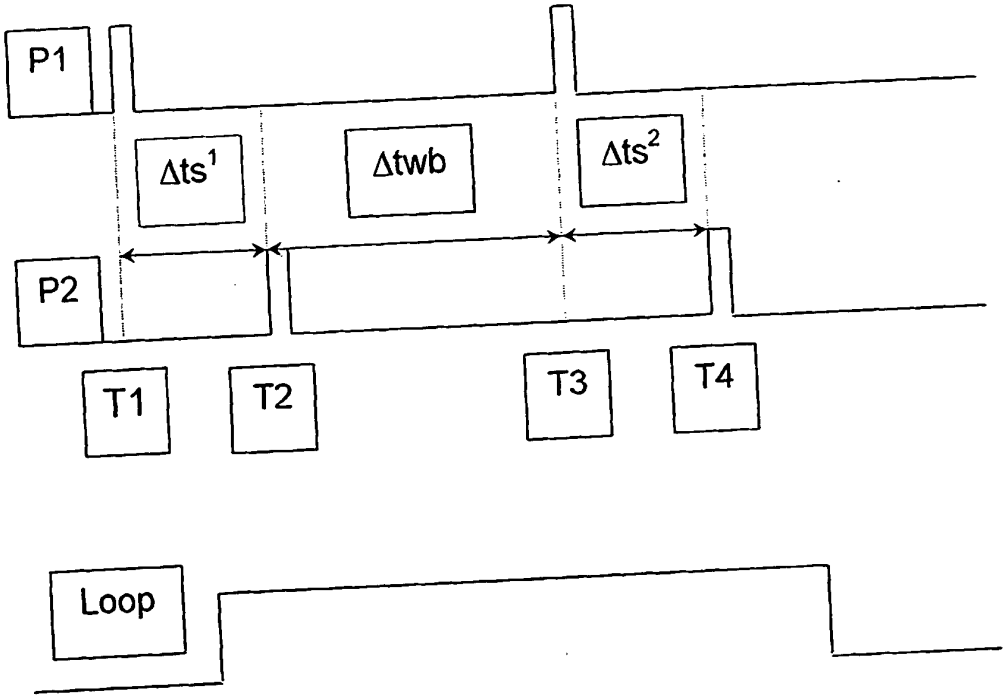

Figure 2

LEGEND

P1	Piezoelectric Sensor 1
P2	Piezoelectric Sensor 2
Loop	Inductive Loop
T1	Time when Front Axle triggers P1
T2	Time when Front Axle triggers P2
T3	Time when Rear Axle triggers P1
T3	Time when Rear Axle triggers P2
Δts^1	Time Interval used to measure the Speed of the Front Axle (T2-T1)
Δts^2	Time Interval used to measure the Speed of the Rear Axle (T4-T3)
Δtwb	Time Interval used to measure the Wheel Base (T3-T2)
cs^1	Count Speed 1 is the Number of Interval Counts between T2 and T1 ($\Delta ts^1 * freq$)
cs^2	Count Speed 2 is the Number of Intervals Counts between T4 and T3 ($\Delta ts^2 * freq$)
cswb	Count Speed Wheel Base is the Number of Interval Counts between T3 and T2 ($\Delta twb * freq$)
freq	Reference Crystal Frequency
d	Distance separating P1 and P2